ABSTRACT OF THE DISCLOSURE

A system for partitioning SONET frames into logical channels in a SONET ring is described. A SONET frame comprising a number of STS frames is subdivided into a plurality of logical channels. Each logical channel includes one or more STS frames. A

5   protection layer is assigned to each logical channel. The protection layer may correspond to protection provided by the SONET ring or protection provided by network elements and specific to the type of data traffic transmitted within each channel. If SONET level protection for a particular logical channel is disabled, the bandwidth for the STS frames comprising that channel may be allocated among two or more nodes in the SONET ring.

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